

INTERNATIONAL CITY MANAGERS' ASSOCIATION

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## PREPARATION OF THE CAPITAL BUDGET

Who should prepare the capital budget? What are the essential steps in compiling estimates, reviewing projects, and integrating the capital budget with the annual operating budget?

What is a capital budget? It is usually considered that part of the budgeting process that is concerned with the planning, scheduling, and financing of all physical improvements such as streets, bridges, sewers, parks, buildings, and other assets of a more or less permanent nature. A capital budget is prepared on a five or six-year basis, is revised annually, and then extended for another year. It presents a priority listing of the improvements needed and a balanced presentation of the revenues to finance these various projects.

Of what benefit is it to a city to prepare a capital budget? For one, it enables the city to develop a well-rounded program of public needs and a dependable order of the urgency of each project in comparison to other projects. It requires municipal officials and the council to review annually all methods of financing capital projects and to relate the amounts available to the needs of the city and its ability to finance various projects. A capital budget enables a city to work with other local government units in coordinating capital improvement projects.

The capital budget is the vehicle that puts the city's capital improvement program into motion. However, the difference between these two terms is not always clear. The Portland, Me., five-year capital budget draws this distinction between the two:

"The capital improvement program is a list, with or without priorities, including all capital projects which are near enough in time to warrant detailed cost estimates.....The capital budget is a five-year financial program with the construction and reconstruction of streets and sewers, schools, parks and playgrounds, airport projects, redevelopment projects, and any other capital projects which involve individual expenditures of over \$10,000."

Long-term financial planning is of even wider scope than the capital budget and is a comprehensive forecast covering as much as 20 to 25 years, setting forth estimates and objectives for public services and facilities together with their means of financing. Long-term financial planning goes hand in hand with comprehensive planning for the physical development of the city (the master plan).

### Responsibility for Capital Budget

Primary responsibility for preparation of the capital budget generally lies with the planning department, but other departments have a considerable role to play. Considerable reliance must be placed upon the finance department for consideration of revenue policies, the public works department or office of the city engineer for engineering estimates, and other city departments for advice and consultation on a variety of projects. Revenue and expenditure estimates for the annual operating budget should be compiled by the finance or budget director.



Despite all the emphasis of the responsibility of the various departments the chief administrator is the real focal point of the capital budget. The planning department, as a staff agency of management, must develop the capital improvement program and budget within the framework of the chief administrator's thinking and fit it into the over-all city program. The role of the chief administrator is just as important in the preparation and presentation of the capital budget as it is for the annual budget. His job as the administrative head of the city government is to be cognizant at all times not only of the immediate needs of the community in terms of number of policemen, fire fighting standards, and other regular services, but also of the capital improvements which represent either maintenance or up-grading of the community's general standard of living.

The chief administrator cannot be altogether visionary in his approach, but both he and the community will lose in the long-run if the capital budget does not provide worthwhile goals for consideration by the city council.

An analogy from the field of private business will be helpful here. Many successful businessmen will state that an enterprise usually cannot stand still--it either must go forward and expand or go backward and retrogress. This is often true of municipal governments. While the community may not expand significantly in population for reasons beyond its control, it must progress in the long-run in community facilities or face the prospect of losing a substantial part of its present population.

#### Types of Projects To Be Included

Decisions must be made in the original drawing up of a capital budget program as to the types of projects to be included. There will be no question about the inclusion of major additions to capital plant such as parks and playgrounds, fire stations, a new city hall, school buildings, and similar projects. Question can be raised, however, about the inclusion of three other types of projects.

1. Should self-liquidating projects such as utility projects or municipal off-street parking lots be included in the capital budget? This question should be resolved by considering the form and organization of the annual operating budget which in turn is based upon the accounting system used in the city. If self-supporting utility enterprises have separate sets of accounts, as they should, then utility capital projects should be shown in a separate section of the capital budget, just as utility revenues and expenditures are shown separately in the operating annual budget. The acquisition and improvement of an off-street parking lot would only be shown separately if the parking lot is accounted for as a utility enterprise on a self-supporting basis, financed by parking meter revenues and off-street parking lot charges.

2. Should passenger automobiles, police cars, and heavy motor equipment be included as capital expenditures for the capital budget? The answer is generally no if expenditures of this type are financed on a recurring basis through a working capital fund with charges to using departments, even though in an accounting sense they are capital outlay items. In smaller cities, however, when motor equipment is bought infrequently, it is desirable to include such items in the capital budget so that these expenditures can be anticipated well in advance. These items may properly be included in the capital budget since its primary purpose is to plan and schedule large nonrecurring expenditures.

3. Should the capital budget include major items of replacement and reconstruction? Such items should be included in the capital budget, but a distinction should



be made between replacement and reconstruction on the one hand and maintenance on the other. This line can be drawn with a fair degree of precision for most activities, particularly for street work. A surface treatment project or regravelling of streets ordinarily is considered as maintenance and thus is a part of the annual operating budget. Street repaving with asphalt or cement concrete is considered reconstruction and thus is a part of the capital budget. Likewise, expensive maintenance projects or remodeling of public buildings can also be included in the capital improvement program.

### Departmental Estimates

The basis of the capital budget is a carefully prepared and organized collection or reservoir of development projects, including those already underway and those sufficiently considered to warrant formal proposal. Individual projects must be weighed on the basis of over-all merit in relation to other proposals, conformance to the master plan, and accuracy of cost estimates.

In Richmond, Va., department heads are given concise and intelligible instructions on project estimate procedures. They are presented with a numbered list which has classified all possible types of projects. This is done in the interest of orderly presentation and consideration of individual projects in their relation to a balanced program.

Projects must be defined and considered in two groups. A primary project constitutes the major portion of a total project while a secondary project is one which arises from, or is made necessary by a primary project. "Modernization of the city hall" would be a primary project of the first type described above. "Widen and reconstruct Hall Street from Jefferson Avenue to Baseline Road" would be a primary project of the second type described above which, in turn, would give rise to or make necessary several secondary projects such as "lowering gas mains," "improve street lights," and "relocation and renewal of water mains."

Department heads in Richmond use "Work Forms" to submit their project estimates. A white form is used for primary projects, yellow for secondary. A form is completed for projects already underway as well as for new projects or ones not yet authorized but meriting further consideration. (The above form is shown on the last page of this report for illustrative purpose. Smaller cities may wish to use it as a guide in adapting it for their use.)

The Richmond form provides space for the complete project title, description, and a written justification by the department head. Cost estimates are broken down for future years in both amount and percentages. Items included in the cost estimates are engineering, site acquisition, construction and other costs. Space is also provided to show available outside funds, prior authorizations by the city, future funds needed and suggested methods of financing. In addition the department head is required to estimate the future annual maintenance and operating costs occurring from the improvement and estimates of any additional revenue. Finally, the department head must list any secondary project resulting from the primary project and its estimated cost.

### Revenue Estimates

Simultaneously with the development of capital projects by individual departments, the planning or finance department should develop revenue estimates to finance these projects. All current sources of revenue should be explored including real and personal property taxes; nontax revenues such as licenses and permits; nonproperty taxes such as admissions, business license taxes, and other sources; service charges including those for self-supporting utility enterprises; special



assessments; and grants-in-aid from other governments. The other major sources of revenue are reserve funds that may be available and the amount that can be raised by general obligation and revenue bonds.

The capital budget for the 1955-56 fiscal year for Springfield, Mo., presents an "estimate of receipts" from the following sources: future bond issues, general revenue surplus, special taxes, county participation, and airport receipts. The same type of recapitulation is made for the sources of revenue for the six-year program of capital improvements. Bond funds are expected to finance a major part of the capital projects in Springfield.

The capital improvement program for Two Rivers, Wis., covering 1955 to 1960 has a careful historical analysis of revenues from 1946 through 1953 for the general fund, the city hospital, public school system, vocational school, and debt service requirements for general obligation bonds. The report points out that as of that date (March, 1954) a two-year program of capital improvements had been completed involving expenditures of \$2,000,000; one-fourth of the program had been financed by borrowing. The report then presents the six-year plan to be financed entirely out of current revenues, including payments from the general fund and other funds, surplus and reserves, and federal and state aid.

#### Estimates of Operating Expense

Many capital projects are of a type to entail continuing operating expenditures. A new fire station, for example, in an expanding section of the city will require immediately upon completion a fire company with adequate men to staff the fire house on a 24-hour basis. Unless these men are available through transfer or reassignment from companies, provision must be made in the budget for the additional men required.

It cannot be emphasized too strongly that these estimates of operating expense must be made as carefully as possible for every capital project. For some facilities the operating and maintenance costs over a period of years will exceed the original capital investment. The inflationary trends of the past decade make it extremely difficult to provide valid estimates. This applies particularly to the spiraling wage levels for municipal employees. The estimates must be made, however, or the capital budget will be incomplete.

An excellent case can be made for preparing a long-term operating budget in conjunction with a capital budget. One purpose is to point out to the city council and citizens that there is a fundamental difference between continuing requirements for operating expenditures and non-recurring expenditures for capital projects of enduring value. Second, both long-term budgets are planning and financial tools which enable management to foresee changes in various city programs and to reflect these changes in a more meaningful annual budget.

These planning efforts, if used to advantage, can save time in preparing the annual budget. In addition, a long-term operating budget is a necessity due to the practical problem of keeping total costs of regular operations and capital improvements within limits of sound financing and a reasonably uniform tax rate. Without an estimate of future operating costs, including additional costs resulting from the proposed capital improvements, this cannot be accomplished.

Winnetka, Ill., prepared a three-year operating budget in 1951 in which the estimates for the third year, 1953-1954, differed by less than 5 per cent from the actual revenues and expenditures for the 1954 fiscal year. (For the methods used by Winnetka see "Budgeting for 1954," by John L. Scott, in Municipal Finance for November, 1951, pp. 87-91.)



Forecasting of probable general fund tax revenues is probably more difficult than expenditures, since many revenue sources are related to unknown, variable economic factors. A careful analysis, however, of past and present financial data, tax collection data and trends, the local and national economic outlook, trends in building permits issued, and the outlook for future construction will help in forecasting future revenues. Moreover, like the capital budget the long-term operating budget must be reviewed and revised annually and extended for another year.

Expenditures shown in the long-term operating budget can be divided into three categories: (1) public improvements, including all major capital improvements to be financed from the general fund, such as the purchase of land, construction or alterations of buildings, major sewer constructions and other improvements of a permanent nature, (2) new equipment including individual departmental equipment of a semi-permanent nature such as trucks, automobiles, public works equipment, office machines, and similar items; and (3) regular operation including all expenditures for personal services, contractual services and commodities.

Estimates of the cost of future public improvements financed from the operating budget are obtained from the capital budget. It is important that the estimates actually be large enough to meet the full cost of improvements in the year they are scheduled. This may be quite difficult in periods of rapidly rising construction costs. One partial solution is to make all estimates liberal and carry over any surplus funds into the next budget. Another possibility is to schedule a number of improvements of varying costs so that if the allotment for one project is not sufficient, one or more of the scheduled improvements may be postponed or abandoned to keep the budget in balance.

Estimates of future requirements for new equipment can be obtained from department heads who should plan their future needs. Cost estimates for new equipment, if obtained from department heads, should be checked by the finance officer or purchasing agent to be sure that adequate funds are budgeted. Planned replacement schedules, especially for public works equipment and police vehicles, should be developed in this connection. Winnetka, is scheduling new equipment expenditures for a three-year period, attempted to keep total new equipment expenditures at approximately the same figure for each of the three years, although there were considerable differences for each department in each year.

Perhaps the most accurate way to forecast regular operating costs would be to prepare separate budgets for each year, attempting to foresee changes affecting each account. This method, however, is neither practical nor necessary and accurate results can be obtained with simpler and shorter methods.

Winnetka, Ill., separated departmental expenditures into personal services and other operating expenses, inasmuch as personal services accounted for approximately 60 per cent of all operating costs. The budget for the coming year was then examined to determine what part of the increase in regular operating expense was due to increases in personal services.

Factors which must be taken into the consideration in estimating future personal services cost are: total current personal services cost, future merit increases, cost of living increases and hiring additional employees. Each of these factors will vary each year depending on the economic situation, the number of employees and additional improvements or programs which require additional employees. For the fiscal years 1952-53 and 1953-54 Winnetka carried in its three-year operating budget an increase of \$14,600 for personal services cost, including an estimate for a cost-of-living increase and merit increases. This amount was based on 4 per cent of the total budgeted amount for personal services in the 1951-52 fiscal year.



The costs of contractual services and commodities in the Winnetka forecast was set at the same amount as its 1951 budget rather than attempt to estimate future increases in the prices of goods and services.

### Review of Estimates and Establishment of Priorities

When the estimates have been compiled, the chief administrator with the assistance of the planning agency should review all proposals and confer with department heads in an effort to correlate city-wide needs with city and regional plans and to develop a system of priorities. The next step is the adjustment of the desired program with ability to pay and the preparation of the tentative program.

The chief administrator must take an active part in this stage of the process of formulating the capital budget. This final step involves adoption of a definite financial policy and the fitting of the capital program to the city's pocket-book. The administrator at this point should secure from the city council at least a tentative approval on a financial policy--whether the city will proceed on a complete or partial pay-as-you-go plan or finance all projects by borrowing.

Since the total requested program is likely to be far in excess of future available funds, it then becomes necessary to select the most pressing projects and to allocate them to given years in the order of need. Some may have to be eliminated and others deferred to a later period. The final schedule then can be drawn for individual departments and for the city as a whole.

The determination of priorities is the most difficult part of the capital budget process for the chief administrator. It is ultimately a political determination made by the city council in which the demands and needs of diverse interest groups must be reconciled within the limits of the city's financial financial structure. The determination of priorities, however, and thus the selection of capital projects should be done as far as possible upon the basis of community planning and systematic procedures which give weight to relative needs of different segments of the community.

These broad generalizations can be illustrated more specifically by examples of the determination of priorities taken from the 1955-1959 capital budget for Portland, Me. Street program priorities are based on the following factors:

"(a) area served, whether residential, commercial or industrial, local or through; (b) people served, in terms of traffic volumes; (c) condition, including appraisals of grade, cross section, rails, and roughness; and (d) adequacy, a measure of how well the street is doing the job at the present time."

The school program is based on a study of population forecasts and predicted school enrollments. The findings were incorporated in a separate planning commission study made in late 1954. A clue as to the priorities for parks and playgrounds is provided in the statement that "most of these projects are small projects designed to provide adequate play facilities in connection with schools."

By implication a priority is established for urban redevelopment with the statement that "failure to continue with this program would undoubtedly mean the continued decline of large portions of the older section of the city with an accompanying loss in tax revenues." Similar standards of community benefit are set forth for other phases of the Portland capital budget including street rehabilitation, sewers, municipal airport, and public buildings.



### Final Preparation of Capital Budget

Once the estimates have been received and the priorities determined, final preparation of the capital budget can begin. In preparing the program for submission to the chief administrator, the staff agencies (finance, planning, etc.) of some cities use the same forms that are distributed to department heads while other cities use special forms or tables. Thus the capital improvement budgets of cities vary considerably.

In Philadelphia a six-year capital improvement program and capital budget are prepared and recommended each year by the planning commission and transmitted to the mayor. In addition to the total recommended capital program and budget, the documents include for each project the estimated annual operating cost, total estimated cost, cost through the previous budget, and cost, if any, to complete beyond the six-year period. A supplementary text is also transmitted which explains the financing of the program and describes briefly the purpose and need for each proposed improvement.

The mayor must forward the capital program and budget of Philadelphia to the city council exactly as he receives them, but he may make any comments or suggestions. Both the capital program and capital budget are adopted officially by the city council after hearings and prior to adoption of the operating budget.

The 1955-1960 capital program for Philadelphia includes a list of major projects completed from 1949 to 1954 and projects as present underway as well as a section on what is planned, including a map illustrating the six-year program. A series of tables indicate for each of the years, 1955 to 1960, the source of funds, projects subject to debt limits, amounts recommended for self-sustaining projects, and debt service costs. This is followed by detailed information in various fields such as streets, highways, refuse disposal, health, welfare, and so on. The bulk of the report is devoted to the recommended program of public improvements grouped by departments and agencies. The capital budget for 1955 is last. It shows the projects by city department and the amounts allocated by sources of revenue from existing and projected loan authorizations and from operating revenues. Five per cent of the cost of each project is paid from operating revenue.

The improvement program of Two Rivers, Wis., for 1955-1960 is financed completely on a pay-as-you-go basis. As such the description of the projects for each year of the six-year period indicates the sources of revenue: general or other fund payments, reserve funds, and federal or state aid. The program report also makes some assumptions regarding population forecasting, gives a statistical resume of the history and geography of the city, and a review of the city's financial history and condition including statistics for the public and parochial schools.

The Springfield, Mo., capital budget is printed in the second half of its annual budget document. The 1955-56 capital expenditures are listed in priority order with the estimated cost, the method of financing, and a short justification and explanation of each project. The projects for the full six-year capital improvement program also are listed in order of their need, with their total estimated cost, yearly estimated expenditures, and sources of revenue. A table of revenue sources shows 1954 actual, 1955 estimated, and 1956 tentative amounts.

### Review and Adoption

Formal presentation to the council is usually the duty of the chief administrator. In some cities such as Portland, Me., the capital budget is presented directly to the council by the planning agency. The chief administrator should,



however, work closely with the planning board to develop a capital budget which has the benefit of both the manager's views and the visionary thinking of planners.

The usual procedure is to adopt with modifications the first year of the capital budget as a part of the over-all current budget and then tentatively to authorize the remainder of the program subject to annual revisions and authorizations. These tentative authorizations of course are not binding on future councils. The advantage of presenting the entire capital budget to the council is that an opportunity for a public hearing is afforded, thereby arousing greater citizen interest.

The capital budget for the first year should be considered an integral part of the regular annual budget prepared by the city manager or chief administrator. It is a matter of choice as to whether the six-year capital budget should be included with the annual budget or should be published as a separate document. There is no question, however, that the first year of the capital budget should be included in a separate section of the annual budget. During that one fiscal year the capital program is just as much a part of the regular operations of the city government as the police department, fire department, public library, or any other phase of the city government.

Capital budget appropriations generally are made to the general fund, utility funds, bond funds, or other funds to which they apply. A separate capital improvement fund is not necessary for accounting purposes provided that separate capital budget records are maintained. Some cities, however, may wish to establish a separate capital fund in order to permit the accumulation of reserves and to carry over appropriations from one year to another. Some officials feel that a separate fund is desirable in order to distinguish clearly between the capital budget and annual budget and to reduce any confusion which might result with capital budget appropriations being mingled in the annual budget with general fund appropriations. In either case, the public works or finance departments should maintain construction progress records of the type described and illustrated in MIS report No. 127 "Management Records for Construction Projects."

The capital budget should be published and distributed to local business, civic and taxpayers' groups interested in the city's finances at some stage in the procedure. This publicity is particularly important if taxpayers subsequently are to be called upon to authorize bond issues for parts of the budget, or to vote special tax levies for certain of the capital projects.

The aid of a citizens' advisory committee may be particularly valuable in securing public approval. Such committees are sometimes used as study groups in the preliminary stages of the capital improvement program, but their value as a means of strengthening relations with the public and bringing the facts to the taxpayer appears to outweigh their use as a research group. See MIS Report No. 130, "Use of Citizen Advisory Committee," for suggestions on the role of such groups in capital budgeting.

After presenting capital budget recommendations to the city council, the chief administrator may have a further job to do, assuming that the council adopts the recommendations, in presenting the program to the community. When council policy has been established it is perfectly proper for the chief administrator to "sell" these recommendations to the community as a representative of the council.



### Cooperation With Other Governments

Most cities in metropolitan areas, and many other cities as well, face the problem of trying to integrate a long-range program of capital projects with those of the independent school district, neighboring city governments, the county government, and special districts for drainage, water supply, and other utilities. In some areas, especially where general obligation bond issues are used, it is a competitive situation with each jurisdiction trying to get its bonds approved first while the taxpayers are in a receptive mood.

A solution to this type of problem is never easy. It depends upon a high degree of cooperation among governmental units and some willingness to give and take. The best answer for the greatest number of cities is the establishment of a regional or county-wide planning commission which can serve as a coordinator and clearing house of the various proposals for capital projects. Such an agency can, at the very least, encourage cities and other governments to avoid duplication of facilities, initiate and help schedule bond issues.

Even better a regional or county-wide planning commission can promote the joint construction, financing and operation of suitable projects. MIS Report No. 104, "Intermunicipal Arrangements for Sewerage Service," has several examples of constructive approaches to intergovernmental cooperation in the provision of a specific service requiring a large capital investment.

Note: This report has been limited to suggestions for drafting and submitting the capital budget. This job can be done better in the context of long-term financial planning with consideration given to community resources and needs beyond the six-year period of the capital budget. Long-term financial planning is described and illustrated in considerable detail in Chapter 13 of "Municipal Finance Administration." The fifth edition of this ICMA manual was published in October, 1955. Grateful acknowledgement is made to the following officials for reviewing a tentative draft of this report and offering many useful suggestions: John E. Dever, city manager, Two Rivers, Wis.; Vernon D. Northrop, managing director, Philadelphia; and Julian H. Orr, city manager, Portland, Me.



PROJECT ESTIMATE

(ORIGINATING DEPARTMENT) \_\_\_\_\_ (DATE) \_\_\_\_\_ (REFERENCE NO.) \_\_\_\_\_

(PROJECT CLASSIFICATION) \_\_\_\_\_ (IN MASTER PLAN?) \_\_\_\_\_ (PRIORITY) \_\_\_\_\_

PROJECT TITLE and DESCRIPTION:

JUSTIFICATION:

DETAILS	TOTAL COSTS		COST ESTIMATE BY FISCAL YEARS (IN THOUSANDS) \$-PER CENT COMPLETE AT END OF YEAR											
			195		195		195		195		195		LATER	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Engineering:														
Survey and Plans . . . . .														
Supervision . . . . .														
Site Acquisition . . . . .														
Construction . . . . .														
Other ( . . . . . ) . . . . .														
TOTAL COST . . . . .		100												
Outside Funds:														
. . . . .														
. . . . .														
. . . . .														
NET COST TO CITY														
Prior Authorizations . . . . .														
Methods and Amounts of {														
Future Financing by City														
Annual Maintenance and Operation . . . . .														
Estimated Revenue . . . . .														
Secondary Projects:														
Grand Total Project Cost . . . . .														

JUSTIFICATION CHECK LIST

1. Present Situation ☐ 2. Need ☐ 3. Alternative ☐ 4. Effect on Work Program ☐ 5. Relationships To Other Projects ☐ 6. Priority ☐ 7. Expected Life ☐